

Listing of Claims:

1. (Original) A method comprising:

initializing a processing system according to predetermined basic input/output system (BIOS) settings for the processing system;

booting an operating system (OS) on the processing system; and

providing a virtual runtime interface that allows a user to modify the BIOS settings for the processing system after the OS has been booted.

2. (Currently amended) ~~A method~~ The method according to claim 1, further comprising:

receiving user input data that requests invocation of the virtual runtime interface; and

automatically providing the virtual runtime interface, in response to receiving the user input data.

3. (Currently amended) ~~A method~~ The method according to claim 1, further comprising:

receiving user input data through the virtual runtime interface, wherein the user input data specifies a modified BIOS setting; and

saving the modified BIOS setting to be implemented upon a subsequent initialization of the processing system.

4. (Currently amended) ~~A method~~ The method according to claim 1, wherein the operation of providing a virtual runtime interface comprises:

- transitioning the processing system from an OS context to a system management mode (SMM) context;

- determining whether an amount of time spent in the SMM context approaches an SMM time limit; and

- if the amount of time spent in the SMM context approaches the SMM time limit, automatically transitioning from the SMM context back to the OS context.

5. (Currently amended) ~~A method~~ The method according to claim 4, wherein the operation of providing a virtual runtime interface comprises:

- providing a BIOS setup interface that appears persistent to the user by automatically interleaving two or more SMM contexts with two or more OS contexts.

6. (Currently amended) ~~A method~~ The method according to claim 4, further comprising:

- saving state information from the SMM context before transitioning from the SMM context back to the OS context;

- after transitioning back to the OS context, determining whether a configuration session has been completed; and

- if the configuration session has not been completed, automatically transitioning from the OS context back to the SMM context.

7. (Currently amended) ~~A method~~ The method according to claim 6, wherein the operation of determining whether a configuration session has been completed comprises:

- receiving input data from a watchdog timer for the virtual runtime interface when the processing system is in the OS context.

8. (Currently amended) An apparatus comprising:

a ~~tangible, machine-accessible~~ storage medium; and
instructions encoded in the ~~machine-accessible~~ storage medium, wherein the instructions, when executed by a processing system, cause the processing system to perform operations comprising:

providing a virtual runtime interface after the processing system has booted to an operating system (OS), wherein the virtual runtime interface allows a user to modify basic input/output system (BIOS) settings for the processing system, and wherein the virtual runtime interface provides a graphical user interface (GUI) that accepts user input data.

9. (Currently amended) ~~An apparatus~~ The apparatus according to claim 8, wherein the operation of providing a virtual runtime interface comprises:

providing a BIOS setup interface that accepts alphanumeric input data.

10. (Currently amended) ~~An apparatus~~ The apparatus according to claim 8, wherein the operation of providing a virtual runtime interface comprises:

providing a BIOS setup interface that accepts input data from a pointing device.

11. (Currently amended) An apparatus comprising:

a ~~tangible, machine-accessible~~ storage medium; and
instructions encoded in the ~~machine-accessible~~ storage medium, wherein the instructions, when executed by a processing system, cause the processing system to perform operations comprising:

providing a virtual runtime interface after the processing system has booted to an operating system (OS), wherein the virtual runtime interface allows a user to modify basic input/output system (BIOS) settings for the processing system;

receiving user input data through the virtual runtime interface, wherein the user input data specifies a modified BIOS setting; and

saving the modified BIOS setting to be implemented upon a subsequent initialization of the processing system.

12. (Currently amended) ~~An apparatus~~ The apparatus according to claim 11, wherein the operations performed by the instructions further comprise:

automatically providing the virtual runtime interface, in response to user input data that requests invocation of the virtual runtime interface.

13. (currently amended) An apparatus comprising:

a ~~tangible, machine-accessible~~ storage medium; and
instructions encoded in the ~~machine-accessible~~ storage medium, wherein the instructions, when executed by a processing system, cause the processing system to perform operations comprising:

detecting a BIOS configuration trigger event after the processing system has booted to an operating system (OS); and

in response to detecting the BIOS configuration trigger event, automatically providing a virtual runtime interface that allows a user to modify basic input/output system (BIOS) settings for the processing system.

14. (Currently amended) ~~An apparatus~~ The apparatus according to claim 13, wherein the instructions cause the processing system to provide the virtual runtime interface by:

- transitioning the processing system from an OS context to a system management mode (SMM) context;

- determining whether an amount of time spent in the SMM context approaches an SMM time limit; and

- if the amount of time spent in the SMM context approaches the SMM time limit, automatically transitioning from the SMM context back to the OS context.

15. (Currently amended) ~~An apparatus~~ The apparatus according to claim 14, wherein the instructions cause the processing system to provide the virtual runtime interface by:

- saving state information from the SMM context before transitioning from the SMM context back to the OS context;

- after transitioning back to the OS context, determining whether a configuration session has been completed; and

- if the configuration session has not been completed, automatically transitioning from the OS context back to the SMM context.

16. (Currently amended) ~~An apparatus~~ The apparatus according to claim 15, wherein the operation of determining whether a configuration session has been completed comprises:

- receiving input data from a watchdog timer for the virtual runtime interface when the processing system is in the OS context.

17. (Currently amended) ~~An apparatus~~ The apparatus according to claim 13, wherein the instructions cause the processing system to provide a user interface that appears persistent to the user by automatically interleaving two or more SMM contexts with two or more OS contexts.

18. (Original) A processing system comprising:

a processor;

memory communicatively coupled to the processor;

basic input/output system (BIOS) settings stored in the memory; and

instructions stored in the memory, wherein the instructions, when executed by the processor, cause the processing system to perform operations comprising:

detecting a BIOS configuration trigger event after the processing system has booted to an operating system (OS); and

in response to detecting the BIOS configuration trigger event, automatically providing a virtual runtime interface that allows a user to modify the BIOS settings for the processing system.

19. (Currently amended) ~~A processing system~~ The processing system according to claim 18, wherein the memory comprises:

a first memory device that contains the BIOS settings; and

a second memory device that contains the instructions.

20. (Currently amended) ~~A processing system~~ The processing system according to claim 18, wherein the processing system provides the virtual runtime interface by:

transitioning from an OS context to a system management mode (SMM) context;

determining whether an amount of time spent in the SMM context approaches an SMM time limit; and

if the amount of time spent in the SMM context approaches the SMM time limit, automatically transitioning from the SMM context back to the OS context.

21. (Currently amended) ~~A processing system~~ The processing system according to claim 20, wherein the processing system provides the virtual runtime interface by:

 saving state information from the SMM context before transitioning from the SMM context back to the OS context;

 after transitioning back to the OS context, determining whether a configuration session has been completed; and

 if the configuration session has not been completed, automatically transitioning from the OS context back to the SMM context.